

Sharing Knowledge, Power, and Respect: Keys in Bringing Communities Together to Improve Science, Practice, and Relationships

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Abstract

Are communities better off because of the efforts of higher education? Extension educators have extended university-based research and technologies that have helped create strong, natural resource-based communities. However, the political and socioeconomic environments in which these communities function are changing even faster than the natural environments. Extension educators boast about being change agents, but are they themselves changing? A team of campus/county-based extension faculty transformed themselves from academic experts into colearners who worked with the practice community and the science/management community to address three critical issues: industry transformation, deteriorating relationships between communities, and improving science through cooperative research. One example highlights the importance of involving the impacted community as an equal partner in designing and implementing a federally declared fisheries disaster program. Another illustrates the benefits of two innovative venues for improving science and relationships between practitioners and scientists.

Introduction

“**T**ransformation through Engagement” was the title of the 2005 Outreach Scholarship Conference. Each of the conference’s five tracks focused on what faculty and staff in public service, outreach, and education can do to transform the environments in which they function: community, global connection, higher education, public policy, or the pre-K through grade 12 system. The statement for the “Transforming Communities through Engagement” track asked several stimulating questions:

- Is higher education improving the human condition? How do we assess this?
- Are communities better off because of the efforts of higher education?

- What are the best practices in academic and community collaborations that can improve economic and social well-being?

Extension educators share with most teachers a desire to make a difference in the world. They want to make a difference in people's lives through public service and by sharing knowledge, conveying skills, and helping others solve problems. Extension educators distinguish themselves from campus-based research and teaching faculty by going beyond research and teaching. Extension focuses on third mission activities, the integration and application of knowledge in service to society (*Boyer 1990*). Extension faculty work shoulder-to-shoulder with citizens to put knowledge to work in the community and integrate new ideas and technologies into practical systems.

In Oregon's coastal communities, extension educators have extended university-based research and technologies that have helped create a strong commercial fishing industry. This industry and the many strong, family businesses at its core make up a community of interest (the fishing community) that weaves throughout many communities of place. However, the political and socioeconomic environments in which the fishing community functions seem to be changing even faster than the natural environments in which community members live and work.

Are communities better off because of the efforts of higher education? Extension educators boast about being change agents, but are they themselves resisting change? Even if one feels a strong commitment to extension education or can vehemently testify that extension educators have done a great job of extending scientific knowledge to help create strong natural resource-based industries like fishing, timber, and agriculture, these are important questions to ask ourselves. This article gives two examples of extension coastal community educators getting away from the "academic expert" mentality; extension faculty from Oregon Sea Grant (OSG) shifted into colearner mode in an effort to find solutions to complex challenges in natural, societal, and political environments. OSG, which is housed at Oregon State University, is a member of the National Sea Grant College Program; it develops and supports research, outreach, and education programs that help people understand, rationally use, and conserve marine and coastal resources.

The first example highlights the importance of involving the impacted community as an equal partner when designing and implementing a federally declared fisheries disaster relief program. This program, which used a peer outreach methodology, was a collaborative effort between the fishing community and the local social service resource community. Although this example relates to specific communities of place (coastal) and communities of interest (fishing and social services), the experience and lessons learned are relevant to myriad communities and environments.

The second example illustrates two innovative venues for improving science and relationships between two communities: the fishing community and the ocean science community. The Scientists and Fishermen Exchange (SAFE) offers a comfortable venue for authentic discussion and information exchange between fishermen and scientists: ideas are developed, relationships are built or strengthened, and participants arrive at a mutual understanding of the industry and ocean sciences. The Port Liaison Project (PLP) adds value to existing funded ocean and fisheries research projects by integrating the knowledge and expertise of the West Coast fishing industry. This program also uses the peer outreach methodology, and the experiences and lessons learned are relevant to communities in general.

Cooperation Is Not Collaboration

Building a truly collaborative effort between academic and community partners starts with realizing that cooperation is not collaboration. One is not better than the other; they are just different. Collaboration is not just extending university resources into the community. It's not just taking science or "science-based answers" out into the community so that people can solve problems. It involves recognizing that solving most problems requires a blend of scientific knowledge and experiential knowledge. Collaboration is also not just thinking up a great project in your campus or county office and then asking community members or groups to join in the implementation. Rather, collaboration incorporates an awareness that people like to be involved from the start; they like to work their way through understanding the problem enough to come up with possible solutions and then pick the ones with the most potential.

Practitioner and scientist partnerships in research often have goals such as helping identify research questions, informing

research design, facilitating data collection, building shared understanding and trust, and increasing credibility of science-based management. Yet making partnerships work and ensuring committed participation and satisfaction can soon prove challenging. The confusion and lack of understanding about the differences between cooperation and collaboration are evident in fisherman-scientist partnerships. *Cooperative Research in the National Marine Fisheries Service* states that there is “a growing trend” to include nongovernmental parties in fisheries research under the general term “cooperative research” (*National Research Council 2003*). Such cooperative research is a part of more and more university research programs and coastal communities where local commercial fishermen are adding research to their palette of income-earning opportunities. The assistance of nongovernmental partners can help fill the gap that exists despite the emphasis on “best available science” often spoken of in fisheries management meetings. Currently the “best available science” often is suboptimal due to limitations in both research methodology and funding available for obtaining more data. The publication goes on to say that cooperative research involves limited roles for some partners, whereas collaborative research involves partners equally in all phases of the research process (idea/vision, research questions generation, implementation, decision making, reporting).

Many partnerships in research are labeled variously as cooperative or collaborative, often by partners in the same research project! Yet collaboration and cooperation are not synonyms. Collaboration, unlike basic cooperation, is all about sharing power. In fact, some call it the “politics of engagement” (*Fear et al. 2004*). Who has the power and how is it distributed or, if necessary, redistributed as the partnership forms and evolves over time? Answers to these questions reveal whether a partnership is in fact cooperative or collaborative.

Effective Fisheries Disaster Relief via Collaboration

The Groundfish Disaster Outreach Program (GDOP) is a great example of a truly collaborative effort because it involved the impacted community (the commercial fishing community) as an equal partner in the design and implementation of a federally declared fisheries disaster relief program. Learning from the less-than-effective salmon disaster relief program of the mid 1990s, in

the late 1990s Oregon Sea Grant pulled together partners from the fishing community (men, women, owners, crew, at-sea and on-shore) and the social service resource community (Oregon Employment Department, Oregon Economic Development Department, Workforce Investment Act service providers, and others) to investigate the possibility of *collaboratively* designing a response program *should another fisheries disaster happen*. Our proactive, collaborative approach enabled us to hit the ground running when the December 2000 federal disaster was declared.

The GDOP had two complementary goals. The first was to inform and connect people in the declining groundfish industry (the fishing community, including self-employed fishermen and their business partner wives, vessel owners, or crew members; W-2 employees of fish processing plants, and other beachside services; businesses and workers who were dependent on groundfish) to their local social service resource community whose services might help them make a transition to another occupation. The second was to build lasting understanding and bridges between these two communities by helping the resource community better understand and serve this unique population within their geographic region.

Over five years, the GDOP advisory committee (with members from both communities) designed and implemented a successful disaster relief program. Using the “peer outreach” methodology originally designed and implemented by Conway and Goblirsch (*Conway 2000*), in five years the GDOP has directly provided information to, advised, and mentored over 1500 people. Of these 1500, over 800 accessed resources directly, with over 300 benefiting from reemployment programs and over 350 from non-work-related services such as assistance with food, housing, mental health, licenses/legalities, and financial counseling needs. This is a significant outcome, as we anticipated the number impacted by the groundfish closure to be roughly 400. In every port over 50 percent of the fleet accessed resources via the GDOP; in some ports this figure was as high as 74 percent. But numbers don’t convey the entire impact. The GDOP was the first truly collaborative fisheries disaster relief program and has yielded many success stories and comments such as, “I’m so happy with my new career in heavy equipment operation. The GDOP made it possible for this former deckhand!”

Is It Science? Practice? Relationships?

Distrust is the biggest challenge to relations between the fishing community and the science community. Whether cooperative or collaborative, academic and community partnerships often strive to improve science or practice. Sometimes they improve one. Sometimes they improve the other. But when they work well, they can improve both, as well as one more unintended yet critically important factor: relationships.

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Building effective partnerships requires being willing to step outside the “academic as expert” mentality and into the colearner mode. This is especially true when dealing with complex, politically charged issues like transforming industry and coping with complicated natural systems and policies and regulations intended to improve them. However, these

same policies and regulations are often the cause for these industry and community transformations. So just extending data, information, or technologies is often not what is needed or welcomed. Rather, there’s a need for rolling up our sleeves and working our way through it *together*. Examples of this are two innovative venues for improving science and relationships between commercial fishers, ocean scientists, and ultimately fisheries managers: the Scientists and Fishermen Exchange (SAFE) and the Port Liaison Project (PLP).

Scientists and Fishermen Exchange: The mission of SAFE is to provide a comfortable venue for authentic discussion and information exchange between fishermen and scientists: ideas are developed, relationships are built or strengthened, and participants arrive at a mutual understanding of the industry and ocean sciences. SAFE’s objectives include:

- Providing regular opportunities for fishermen and scientists to get together to informally find and share mutually interesting information, research ideas, and needs.

- Creating a comfortable atmosphere so that, over time, frank and respectful exchanges can take place on even the most contentious issues.
- Providing a place to listen, learn, and understand diverse viewpoints while getting to know, respect, and understand each other.
- Setting a solid base for effective cooperative research to benefit the resource and the industry, and to enhance resource management.

There are currently over twenty-five active partners in SAFE. Roughly half are scientists or fisheries managers, and half are members of the fishing community. Commercial fishing partners represent myriad fisheries and gears (types of equipment used), and experience ranges from several years to several decades. Science community partners come from academia, federal agencies, and state agencies. Oregon Sea Grant Extension faculty participate in the content and manage the process of SAFE meetings.

SAFE meetings are held three times a year. The fishing community and the science community each have a meeting host who assesses and generates interest among members of the respective community to encourage attendance and full participation. Meeting design encourages genuine dialogue in a comfortable, respectful environment. Each meeting has a predetermined topic that is of interest to all partners. Meetings start with a quick review of SAFE's mission and principles of operation, followed by a brief presentation to kick off the hour-long dialogue. Meetings end with a brainstorm for the next meeting's topic and a brief evaluation of the meeting.

As one SAFE fishing community partner states, "It's all about building respect and relationships." Bringing scientists and fishermen together to get to know each other and to share and learn together challenges stereotypes and has led to understanding and cooperation. SAFE partners are honestly impressed by each others' knowledge and commitment. An example of the results such a partnership can achieve came about when a large ocean sonar study was scheduled to occur right at the peak of crab season in prime crab grounds. This would have been catastrophic for both the research project and commercial fishing. The dialogue at SAFE resulted in a successful research project that did not interfere with the commercial crab fleet. Or, as a

SAFE scientist partner observed, “Problems . . . big problems . . . were avoided.”

By establishing a comfortable and open venue for regular communication, SAFE sets the groundwork for both relationship building and new, more cooperative ocean research. The focus on information exchange benefits the work of fishermen and scientists in the near term. Relationships built or strengthened—between today’s and tomorrow’s fishermen, scientists, and managers—have the potential to bring about long-term improvement in science, practice, and management.

Port Liaison Project: The Port Liaison Project (PLP) “adds value” to existing funded ocean and fisheries research projects by integrating the knowledge and expertise of the West Coast fishing industry. This program also uses the peer outreach methodology, this time in the form of regional “port liaisons.” Funded by a grant from NOAA Fisheries Northwest Fisheries Science Center and administered by Oregon Sea Grant, the PLP seeks to improve science, practice, and relationships. The desired outcome is to support cooperative research and encourage the movement toward true collaborative research.

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Currently there are ten regional port liaisons. These partners within the commercial fishing community are located in ports from Washington to central California. The role of the port liaisons is to help promote the PLP in their port regions and to identify “industry cooperators” (members of the commercial fishing community) and connect them to academic and agency “research cooperators” (members of the science community with funded ocean or fisheries research). The role of the industry cooperators is to add value to any research project they cooperate with. The role of the research cooperators is to utilize the experience of the industry cooperators to best add value to their ocean or fisheries research project.

When a request for funding is received, it is initially reviewed for completeness, type of industry cooperation requested, and existing funding. Once this initial review is complete, the group decides whether the PLP has the potential to “truly add value” to the existing ocean or fisheries research project. If so, the port liaison for one or more regions identifies a list of possible industry cooperators who fit the type of industry cooperation requested. This list of potential industry cooperators is presented to the research cooperator, who is ultimately responsible for choosing which industry cooperator(s) to work with. The PLP then compensates the chosen industry cooperator(s) for their time and the expertise they provide to the research project.

The PLP has a list of over 380 industry cooperators, from ports in coastal communities ranging from central California to northwest Washington. These cooperators possess a combined total of over 5,000 years of experience in numerous gears (hook and line, long line, trawl, seine, pot and trap) and fisheries (groundfish, whiting, shrimp, crab, salmon, albacore tuna, and sardines). The PLP also has a project advisory committee consisting of four science community members, two commercial fishing community members, and one at-large community member. Their role is to groundtruth, advise, and help get the word out.

The initial evaluation of the PLP shows outcomes (to date) that include a wide variety of tasks being accomplished successfully. More importantly, relationships are being developed or strengthened between these two interdependent communities that will benefit both in the future.

Conclusion

When Mike Healy, University of Georgia, was reaching out to promote the 2005 Outreach Scholarship Conference, he stated, “Societal problems are not static; therefore solutions cannot be static. To be effective, the engaged institution must continuously transform itself to address changing society needs” (2004). This article has looked at the concept of the continuously transforming engaged institution—specifically, the extension educator—with regard to three questions: What are the best practices in academic and community collaborations that can improve economic and social well-being? Are communities better off because of the efforts of higher education? Is higher education improving the human condition?

This article has illustrated that best practices include understanding the politics of engagement; the benefits and costs of cooperation and collaboration, as well as the differences between them; and the importance of a commitment to effective communication. Is higher education improving communities and the human condition? If you ask scientists or practitioners who push through their fear and isolation to work together at a SAFE meeting, or if you ask fishing community members who transitioned into new occupations, they might stop, think, and then thoughtfully say, "Yes, but not alone." And in my opinion they'd be right. Improving the human condition, helping communities to be better off, and determining the best practices to improve economic and social well-being are not things that will happen "alone." They are, in fact, the products of the difficult, terrifying, exhilarating, and rewarding efforts of people who work respectfully together.

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About the Author

- As an Oregon Sea Grant Extension faculty member at Oregon State University, Flaxen Conway works with coastal communities and families affected by changes in natural resource policy and management. She helps access resources, build coalitions, and plan strategies that meet the needs of all interests. In partnership with community learners, agency personnel, and other subject matter specialists and agents, she provides coastal and statewide outreach for the development of community educational programs and materials related to conflict transformation, personal and group leadership, community economic development, and managing change.